



## Factors Affecting Strategic Planning of Information and Communication Technologies Use by Academic Libraries

H. H Muhammad<sup>1</sup>, Wael M. S. Yafooz<sup>2</sup>

<sup>1</sup> Faculty of Computer and Information Technology, Al-Madinah International University (MEDIU), Malaysia,

<sup>2</sup> Faculty of Computer and Information Technology, Al-Madinah International University (MEDIU), Malaysia

### Abstract

The main purpose of this research project is to find out and investigate the factors that affect the strategic plan of information and communications use by the academic library with the reference to federal collage of educations technical Gusau as the case studies. In order to investigate and find out the level of information technology so as to deliver a good services which will support and keeps the strategic vision and missions goals which was set by collage. The research finding illustrate that the academic library is in Lack of highly professionals and computer expert in information Technology and in adequate manpower and professional personnel to run the project in the academic library. Moreover the academic library should have the availability and the accessibility of the information and communication technology resources in the library which contain the software's and hardware applications that will help and support the facilitate as well as to the services in the academic library in the institutions, the library should be expected to be fully connected with the network

Keywords: (strategic planning, information and communication technology)

### 1. INTRODUCTION

Information technology (IT) has been defined as the technology which uses computers together information, and transfer information for the purpose of handling data for computing and telecommunications technology. Nowadays IT becomes the common technology to use the term Information and communications technology (ICT) because it is usefulness to work on a computer which has no internet connection. Moreover computer becomes the most working tools for information technologies most especially in the area of information scientist business organizations, libraries and other information centres. (Bryan 2016). The developments in new technologies have changed the most important revolutions of old well-known idea that procedure to some level and pave a way for the new improvements and how to storage in academic libraries activities nowadays in to a huge degree. (langobici,A, et al,2013).

The choices and the changes in information technologies that are now available make it a critical step for libraries to adopts the new strategies that will improved the existing systems delivery and adjust to the new emerging technologies, this problem of developing of new information systems and improving new ones is meanly common in most of the organizations and also is not unique to libraries (Cox, 1993).

The federal collage of education (technical) Gusau is a female institution of leaning which was established in the year 1980 in the city of Gusau the capital Zamfara state Nigeria (formerly Sokoto state). Gusau lies between latitude 6.8 degree north and long side 6.8 degree east; it is

situated at a distance of about 1575 kilometre from the Atlantic Ocean.

The collage was established to train the female student in academic knowledge to become an effective and proportional teacher of technical subject. The college was establish with different department which include the School of education, School of business education, School of languages education and, School of sciences education . (Alumode et.al 2016).

However the collages library become into existence when the collage was established in the year 1989, the operations of the library commenced into operations with the facilities seating of 80 readers, 860 books. The major pioneer of the library staff where categorise in to three (3) which where the one the chief Liberian, Deputy Liberian and junior library assistance. In the earlier year of 1992 the academic library commences to increase the numbers of the collections books and employed the new numbers of the staffs. (The Academic Board, 'Federal Colleges of Education Act' 1986).

The national commission of colleges of education (N.C.C.E.) accreditation process require academic library to have considerable sitting numbers of the equipment and electronic facilities that where equip to the library which include reading table, chairs, computers , photocopying machines internet facilities and other available reading materials. Moreover the books collections where increased into 3000 volumes in other to improved the service delivery to the college student. (The Academic Board, 'Federal Colleges of Education Act' 1986).

Academic library plays a very important parts as in organization of high learning or institutions of higher learning, it also play an important role in the academic



programme in selecting organizations and disseminating of information to enrich the curriculum of learning, but it is deeply affected by the revolutions of information technology (Eyo et al. 2014). Moreover academic libraries are facing a lot of pressures which require a quick response in terms of adopting new technology in order to remain relevant in teams of information technology. The quick development in area of the technology as well as the new changes in to those areas which include the scholarly communications, higher education's pedagogy which are affecting the users expectations are forcing the academic libraries to develop new resources and service areas. (Saunders 2015).

The management of the IT strategic planning as well as the application of the new modern of information and communications technologies in the area of the academic libraries which is in use Nigerian higher education of learning appears to be insufficient and inadequate due to different types of factors. (Yacob 2011). Emmanuel et al, 2008 categories those factor due to the lack of proper management of the IT resources, human error, challenges in educating users, maintenance, security issues, preservations of electronic information resources, lack of awareness and commitment among library stakeholders.

## 2.2 RELATED STUDIES

Information and communication technology (ICT) can be describe as the process of conveying and bringing together of computing and telecommunication technology application for purpose of handling and the control the information in the organisations. Information Technology as a technical support for human thinking and communication has been evolving over in library and information system over decades. (Oliveira, 2016) New improvements have been rapid over the last few decades, it was recently that the term information technology has been used as a collection term for the whole variety of technologies providing the ways and means to acquire, store of information, transmit and retrieve data and process information over the networks. The new Development in the field of computer and information and communication technology has show a new measurement to the program of the information handling (Manglik, 2013).

Information technology is defined differently using different terms, but it is mainly defined as new technologies which uses new technologies that are applied in creation, storing, selecting distribution of information. Academic libraries can be described as those libraries that are purposely set up in higher education of learning, they where build-up to support teaching and learning in the institutions, teaching and research processes. The presentation of different data innovation (ICT) patterns has prompted to rebuilding, change in work examples, and interest for new abilities, work retraining and renaming

## 1.2 RESEACH QUESTIONS

1. What processes of the strategic planning are being used in Academic library of federal college of education technical Gusau?
2. How important and well-organized is the management of the IT and strategic planning for the academic library?

## 1.3 RESEARCH OBJECTIVES

The research will be conducted to find and address the following

1. To find out the level applied by the academic library to address IT strategic planning process in automation of information and communication technology at federal college of education, technical Gusau.
2. To find out the current challenges which are connected with IT strategic planning process in the library?

positions. Mechanical progression of the previous decade, for example, the electronic database, online administrations, CDROMs and presentation of web has profoundly changed access to data. Throughout the year prior, scholastic libraries have been influenced by the revaluation changes in data and correspondence innovation. (Goncaves, et al 2015)

## 2.3 CONCEPT AND THE DEFINITIONS OF IT STRATEGIC PLANNING

The term information technology strategic planning can be defined as the wide-ranging plan the expertise of the information technology uses to guide and monitor their organizations. Moreover an IT strategy is normal to surround all the features of the management technology in the organization which comprise the hardware and software, capital management, risk management and also the cost management in the initiative IT environment. Information and Communication Technology (ICT) has convey extraordinary revolutions and changes to Academic library, many organizations have prefer to formalize their information technology strategic plan in way of writing article or in a reasonable scorecard strategy map. The strategic plan documentation has to be in the way of flexible and to be will enough so that i can change the response of the organizational situations as well as the priority in a giving aria in the organizations which can involves the available skill and arrangement, the budgetary constraints and core competencies moreover to rising



understanding of user needs as well as business objectives. (Torres-Pérez et al. 2016)

The most important section of organisational occasionally has put in action some important choice and those kinds of choices that handle and influence the entire future of the organisation for some years into the opportunity of that organisation. The reason for those choices are considered in order to investigate and address the actual main and most important factors facing the organizations such as the concerned that are so considerable in the organizations those are been called the elephant of strategic. Thereby the exacting meaning of strategic planning must have something about large choices in the organisations. (Merchán et,al 2016)

The strategic planning is a very important within the organizations that need a major reassessment, the scientific modification that drive the new ways and actions of adoption its works or the declining of its economic construction and the a change in the top administration of the organisation demand a huge re-organisation are instance of such internal forces in particular organizations (Chan et, al, 2007).

The supporting information systems choices all along with the new organizational needs where made known in the early 1980s the IT strategic planning was classified on top of any organizations list as an serious and a critical issues in t the top management list for almost a decade now, since that time the issue of the information technology strategic planning has not been taking out of an organisations schema.

### **2.3 THE REASON WHY STRATEGY PLANNING SHOULD BE APPLIED AND IMPLEMENTED IN THE ORGANISATIONS**

The current modifications in side of computer and information technology are significant in a propagation of recent and moving and motivating chances. Those opportunities involves in the increased and the development in the use of multimedia and communication systems together with the arrival of difficult and highly intelligent developed of information systems all of which are being approved for delivering information on computer platforms and so far not too costly evaluated with their forerunner (Bozonokolic, 2011).

However to the growth and new development of sentimental and well-organized computerised IT user's administration are firmly encouraged to formalize the change the example of a data frameworks technique so as to adjust all the various and different weights and in addition the requests of the business organization. A fitting and pertinent and additionally legitimate methodology of this classification manages gear, and staff necessities as well as needs to accept and perceives and additionally coordinates the data in a way that appropriate data

penetrates and attacks all points , and corners of the association (Bozonokolic, 2011).

### **2.4 ASSESMENT OF RISK IN INFORMATION TECHNOLOGIES IN ACADEMIC LIBRARY AND INFORMATION CENTRE**

#### **1. Concept of risk assessment.**

Risk can be recognized as a conceivable damage that may emerge from present and existing procedure which may frame some occasion later on. The Risk is existing in all aspects of our everyday exercises. Many organizations have put much attention on the risk which might apply in their organizations. In the view of IT perspective on the security observations the risk management has being recognized as the way toward comprehension and responding plainly to the key variables that might be conceivably prompt to disappointment in the protection, availability, uprightness, and additionally the accommodation of a data innovation in the organisation (Bozonokolic, 2011).

#### **2. It is very necessary to manage Risk in organizations**

The main purpose of managing in organizations is to protect and secured the companies' vision and mission and also assets of the organizations. The risk management should be the part of the management function instead of being in a technical purpose. Managing the risk is very important in an organisation. In addition understanding the exact of the risk to the framework will give framework it proprietor clear opportunity to secure and ensure the data framework appropriately with its esteem and noteworthiness to the association organisation.

Despite the fact that a few associations have an exceptionally halfway assets and risk in all way can never be totally evacuate or decreased to nil, consequently to comprehension chance, principally the size of the risk helps the organization to underscore and organize rare assets and handles the issues in an appropriate way (Baro, et al, 2011).

#### **2.5 Benefits of Risk Assessment in academic libraries**

The future upcoming many expertise proclaim is going to be digitalise, indeed the academic libraries have been extremely affected and in one way or the order is has change and transformed as the result when the information technology was introduced after the World War II. The digital technology has transformed the services completely by giving the academic library extremely productive and viable ways and strategies of doing the old and customary



errands of keeping up the stock. It is not distinguishes on how the Technology will influence the accumulations of advancement in the academic library (Danny, 2009).

The inner controls environment of the Library of these days are significantly depend on data innovation, there is requirement for a solid and strong mechanical framework so that to bolster, for example, online lists in the scholastic library the appropriation frameworks, development of advanced surrogates of accumulation protest and furthermore the support and protection of copyright records which implies that IT chairmen needs to hold up under a vital and generous obligation regarding the stewardship of legacy resources. With a specific end goal to make a compelling and effective procedure of making reasonable accumulations and open for drawn out stretch of time, the accumulations of the chiefs of it office ought to build up a solid relationship that will help and bolster their correlative assignments. In addition the risk evaluation forms have really exhibited a structure for such associations in the academic library and data focus.

The academic libraries get hold of more data assets where were done in computerized way, and furthermore in the meantime administrators need to get some information about how to secure and ensure electronic data assets as they do about their customary and olds assets. In any case, IT assets join many focal points. Both stock and bibliographical controls are exceptionally straightforward set up secure and keep up suitably. In any case, protection and security dangers are by and by much better and bigger in the realm of computerized articles than in that of more established and customary materials. It is extremely unlikely yet to shield the life span of computerized information for over 10 years, notwithstanding that, PC documents, though scarcely defenceless against physical

#### 4.1 DISCUSSION OF THE RESEZRCH FINDING

Attempt was made to present and analyzed the responses obtained from the administered questionnaire. Descriptive statistic and percentage were employed to present and analyze the result using table and figures, all with a view to answering the research question and for the serious hypothesis to be tested

The purpose of this research work was to investigate and to examine the factors that are affecting the IT strategic planning in the library with the reference to academic library of the federal collage of education "technical" Gusau. Moreover attempt was made to present and analyzed the responses obtained from the administered questionnaire. Descriptive statistic and percentage were employed to present and analyze the result using table and figures, all with a view to answering the research question the data collected have been analysed using the proper

burglary, and live in on PC frameworks that might be helpless against infections, assault by programmers, and coincidental programming catastrophes. (Bozonkoli, 2011).

### 3 RESEARCH METHODOLOGY

The successful of any research works depend on the greatly on the technologies which was adopted in carrying on the research, the designing of the research project involves the organizations of the data collection and analysis of the data to full out the purpose of the research to provide the information which is needed. (Krubu et, al 2011)

the method that where use to carry on the research is the data collection which will help in finding and discovering the information technology IT strategic planning process in the academic library with the reference to the Federal Collage of Education Technical Gusau, simple size and simply methods as well as methods of data analysis. The method specially identified research as a choice of action with the aim of discovering the related information needed by a source for responding and answering the related research questions based on a specific research area. The population of this study including the student whose are the currently the most patronising the library IT resources the dean of the IT department, library staff. Moreover the total numbers of the populations will be around 30 which compromise the student and staff that were available at the time of data collections.

Collecting and gathering of the data during this research questionnaire were us as an instrument in order to obtain and acquire authentic and accurate information for this research.

method of data analysis, moreover the summary of main finding are presented and discussion on the finding.

#### 4.2 Respondent's characteristics and classifications

**Table 1 Gender table**

HOW OLD ARE YOU	Frequency	Percentage
18-25	53.8	54%
26-30	38.5	39%
31-35	7.7	9%
40-50	1.1	1%
TOTAL	100	100

Majority of the respondents are females in different department Reveals that the questionnaire was administered between the male and female with the percentage of 70% to respondents where female with the male respondent 30% because the institutions where female territory institutions.



**Table 2 age declaration**

HOW OLD ARE YOU	Frequency	Percentage
18-25	53.8	54%
26-30	38.5	39%
31-35	7.7	9%
40-50	1.1	1%
TOTAL	100	100

The age table shows that the age of 18-25 where 54%, 26-30 were 39%, 31-35 were 9% and 35 above were 1% which the questionnaire were administered within the four categories as the percentage appears in the above mention.

**Table 3 position in the institution**

Position in the Institution	Frequency	Percentage
1. Library Staff	14.3	15%
2. Academic Staff	35.7	36%
3. Student	50.0	50%
TOTAL	100	100

The table for the Position in the Institution shows that the institution comprises of library staff were 15%, academic staff were 35% while the student carries this high number of percentage which were 50%, which the questionnaire were administered within the three categories as the percentage appears in the above mention.

The ten research questions were formulated in to two different sections with five point scales of agreement were used in order to elicit responses from the library staff, academic staff and student of the collage.

### **5.1 DISCUSSIONS ON FINDINGS**

The research work were conducted in order to find out and investigate the factors that affecting strategic planning of information and communication technology used by the academic library with the reference to the federal collage of education technical Gusau.

Based on the data collected with regarding to the research objective one on the investigation to the strategic planning process in the library shows that strategic planning has determines the future of an organizations of institutions of

learning is heading over the future, also to express how successful the institution going to get there.

According to McNamara 2003, has described the strategic planning as the way forward in initiating the organizational changes, as necessary and importance component of the organization process, the improvement and assessment of the organisations foundations lies on the strategic planning process which compresses the mission, vision and the future of life of the guiding principles.

Table: 1 of the research question one (1), shows that the survey conducted with the questions: Do u agree that the strategic planning process been using in the library is affective? The research question finds that out of the total number of the respondent the percentage of 71% were agree that the library used an effective method of strategic planning which means that different methods of planning models where applied. With the numbers of the respondent which represent 14% where undecided, the 7% of the respondent were strongly agreed with the also the number of 7% were also disagree. The research works revealed that the facilities of ICT that were present are effective and efficient, also the information are update in the library as well as well-organized resources of ICT and information sharing in the library.

According to M. E. Bruce 2011 stated that the ICT has held an important key to the accomplishment and development successes of modernizing information services in the academic library. The technique of application of ICT is plentiful but characteristically used in transforming the updated and current paper print record in the entire process of storage, spreading as well as retrieval of information resources.

The strategic planning process involves as an assessment and improvement of organisational the future and guiding principles. Table 2, finding also revealed that the purpose of the strategic planning process is to assist the academic library to keep on it focused and maintain the strategic planning which will help the library to manage the information technology in the library information centre in a suitable approach Luiza , et al, (2015).

Table 3 results shows and indicate that the data collected the total number of 50% respondent agreed the total



number of 28% where undecided, while the number of 21% of the respondent were strongly agreed. Thereby the result outcomes outline that respondent with high number of 50% agreed and believed the exclusion of the risk in an organisation is necessary it is something that needs to be giving more attention. Thereby is the responsibility of the top management to apply for a strategy which is cost effective and also to create the most suitable techniques so that the risk can be control and reduced mission risk to minimum and acceptable levels in the institutions. Ward, et, al (2012).

The main purposes of the IT strategic planning process is to determine and make decisions for the library strategic directions for information technology so that it can provide the most relevant and affective needed technology tools to the library information centre, it can also re-invent the organization to way where everybody can becomes part of the IT process of the organisation. The planning of the IT strategic looks beyond the expectations in the libraries technology planning by scrutinizing and investigative new potentials and the planning process and the smart for the libraries roles in to the digital time. The library must remain technologically in relevant to meet the desire of its users in the institution the plan in the libraries and the information centres. (Kotagiolas, et al, 2009)

Table 8, the result on the research question whether if the current IT resource in the academic library require any amendment or improvement the majority of the responded which represent the 50% were agreed with the point, that the facilities IT resources used in the academic library need some amendment and need to be replace with new facilities. The numbers of 28% of the respondent were undecided, while the numbers of 24% of the respond were strongly agreed However, the results of the investigation publicized that the library is in need of new Information Technologies facilities which will help and to support the teaching and learning in the institution (Michael Earl, 1995).

The information system strategic plan process should outline the levels of directions for the technology and also to specify the project plans in order to implement in the next decade within the organizations also with the new technology budgetary on each year or within the quarterly basic which will be depending n the organizational policy. (Bozonokolic, 2011).

Table 9, of the research questions show that the majority of the responded which represent the total number of 66% were agreed that there are allot of difficulties the student of the collage are facings while try to make the use f IT resources in the academic library, the number of which

represent the 16% of the respondent were undecided, the 8% f the respondent were disagreed and strongly disagreed respectively. The result shows that the academic libraries in one way or the other have some problem that need to be giving more attentions most especially on the issue of electric power supply the poor of internet connections, as well as inadequate of information technology resources The management of the library has to build responsibility of the culture of confidentiality, securing and protecting the user data. Issues regarding to the privacy protections is not just the resistibility of technical staff but also it involve issues such as educating and also training the library staff and the user of the information system in the academic library regarding to the privacy and limiting the access to the personal identifiable information (Yacob, 2011)

## 5.2 SUMMARY

This study was conducted to find out the Factors Affecting Strategic Planning of Information and Communication Technologies Use by Academic Libraries with the reference to the federal collage of education technical Gusau as the case study.

the research work analysis shows that the IT strategic planning at the academic library of the federal collage of educations technical Gusau are facing allot of problem and many difficulties that are exiting in teams of the application of the information and communication technology Thereby at end of this research am here to draw the conclusions with the following key problems or factors which I categorise as following:

The academic library should have the availability and the accessibility of the information and communication technology resources in the library which contain the software's and hardware applications that will help and support the facilitate as well as to the services in the academic library in the institutions moreover the library should be expected to be fully connected with the network.

Moreover Lack of highly professionals and computer expert in information Technology and in adequate manpower and professional personnel to run the project in the academic library.

The funds which are allocated are inadequate to run in the automation unit of the academic library at federal college of education technical Gusau. The academic library should have the intention for starting computerization project if it was provide with IT specialized and whose can be able to make an excellent strategic planning of information technology resources to the academic library.

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